

Subject: Notes relating to the water users meeting for  
Ogden Valley, March 24, 1969

*Re Ogden River System*

For several years the State Engineer had a policy in Ogden Valley above the mouth of the canyon and the Weber River drain above Gateway of granting Application for Appropriation of 0.015 cfs for domestic and stockwatering purposes only. No applications including irrigation uses were being approved during this period. There were, naturally, many violations of the regulation by people who had approved applications who continued to irrigate lawns, gardens, etc., from wells drilled under these applications.

On December 15, 1965, the State Engineer met with the representatives of the Ogden River Water Rights Association and changed the policy regarding appropriations and determined that after January 1, 1966, no new Applications to appropriate would be granted on sources that contributed to the Ogden River, which virtually shut down the Basin to further appropriation. The State Engineer did, however, accept a very liberal policy regarding Change and Exchange Applications where existing direct flow rights or storage rights could be changed or exchanged for underground water to be diverted from wells in the area. At the present time there are 72 pending Applications for Appropriation or Permanent Change in the Ogden Valley area.

At the time this policy was determined Causey Reservoir had not been finished but was nearing completion; all exchanges being made on storage water were exchanged with waters from Pineview Reservoir. This assured that water used in the Ogden Valley would not interfere with the direct flow in the Ogden River below Pineview Reservoir and the storage water allocated to these exchanges was credited to direct flow. This caused some concern to water users in the valley, particularly Eden Irrigation Company, which relied on return flow to the North Fork of the Ogden River to make up a substantial part of their decreed rights.

*Policy*

In viewing the structure of Ogden Valley, it appears that there are several aquifers which yield water and are the source of culinary water in the valley. The principal aquifer, of course, is the deep one which serves as the source of water for the Ogden City artesian wells and whose recharge area is quite high in the valley. Other aquifers which are shallow apparently have other recharge areas and discharge areas depending on their own structure.

During the summer months the total flow of North Fork is diverted into Liberty Canal and the channel itself remains dry for several miles until the return flow accumulates in the channel together with some flow from tributaries and becomes sufficient to supply the needs of Eden Irrigation Company. The Eden Diversion again takes all of the flow of North Fork, and that water which escapes the diversion disappears into the river bed within a few feet below the diversion structure. There is no further evidence of any surface flow in North Fork until it approaches Pineview Reservoir where there is sufficient return flow to accumulate a few second feet of water where the North Fork passes under the highway and enters the reservoir. It appears that there is some structure which forces the water to the surface near the Eden Diversion and, according to the old timers, the Eden Diversion was placed where it is because of this structure.

Somewhat the <sup>same</sup>~~some~~ condition appears to exist at South Fork and Middle Fork. This is probably not as noticeable since the distances are less than on North Fork. The flow from South Fork is diverted by the dry dam at the Huntsville Diversion into the Valley Canal. The water that escapes this diversion travels a short distance varying from a few hundred feet to a few thousand feet below the diversion, depending on the flow, before it, too, is lost to the underground as underflow in the channel, or as recharge into an aquifer.

In order to make the exchange agreements as realistic as possible and to return the water being exchanged to those who may be adversely affected by the withdrawal of underground water, it would appear that the most reasonable course of action would be to divert storage water from Causey Reservoir

to restore the water to the parties in the area affected by the exchange. Tentatively, I would recommend that this be done as follows:

For all wells drilled on North Fork above the Eden Diversion the waters exchanged would come from Causey Reservoir and would be credited to the Eden Irrigation Company in the Valley Canal. Water diverted from the Middle Fork area above the Huntsville Canal would be taken from Causey Reservoir and credited to the Huntsville Irrigation Company. Water from wells drilled in South Fork above the Huntsville Diversion would be taken from Causey Reservoir and credited to direct flow in South Fork. All water for wells below these areas could be charged to Pineview Reservoir and released as direct flow from Pineview Reservoir into the Ogden River below the dam.

With the restriction on appropriation and with the necessity of establishing an existing right for all new wells which are drilled in the area, it is more and more important that we have clear records of existing rights. There were many unrecorded wells drilled in the Ogden Valley that have been in use. Some are still in use. Recording could be done through filing of Underground Water Claims. It is the practice of this office to substantiate the existence of these wells before applications to change or replace have been approved. There are many people who are using springs for domestic and stockwatering purposes. At the time the Ogden River Decree was made, it did not include all of the domestic and stockwatering rights. There are many of these which have no record in this office. These springs could be recorded through the filing of Diligence Claims for right prior to 1903 or Underground Water Claims for sources developed prior to 1935.

There is also a problem in the establishment of the present-day owners of many of these rights and of the decreed rights on the Ogden River. It would be to the best interests of all persons to update their ownership records by contacting this office for the appropriate documents.

One other subject which will undoubtedly be discussed at the meeting is that of the drilling of new wells by Ogden City to replace the artesian wells under Pineview Reservoir

which are badly corroded and contaminated and do require replacement. Of concern to the people of the valley is the possibility that new wells, in a new location and being pumped may interfere with the wells for domestic purposes in the area. The decree said that "Ogden City is likewise entitled to the flow from the forty-eight (48) artesian wells located at the bottom of the Pineview Reservoir, but shall not be entitled to drill more wells in that area, except to replace by a well of like size any of said wells which may become clogged or otherwise abandoned by said City, nor shall it be entitled to accelerate the flow of such wells by pumping." They are also limited to 22.0 cfs of water daily, available between July 1 and September 30. Ogden City is now drilling a 20-inch test well on the peninsula South of Eden between North Fork and Middle Fork. Some concern has been expressed as to what interference will be caused by test pumping of this well and the disposition of waters from the well.